

Chapter V

Findings, Results and Discussion

5.1 Findings of the study:-

The researcher arrives to the following conclusions in the light of analysis and interpretation of the data. The findings are as follows:

1. The learning outcomes of students in relation to pedagogical content knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Thus, there is positive correlation between student's learning outcomes and Pedagogical Content Knowledge of social science teachers in elementary schools.

2. The learning outcomes of students in relation to technological knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Thus, there is positive correlation between student's learning outcomes and technological Knowledge of social science teachers in elementary schools. This shows that teaching becomes more effective when any kind of technology is used in classroom. It also gives new direction and reinforcement towards learning.

3. The learning outcomes of students in relation to pedagogical knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, we conclude that there is positive correlation between

student's learning outcomes and pedagogical Knowledge of social science teachers in elementary schools. It shows that teaching methods used in the classroom matters and effecting teaching includes various types of teaching style.

4. The learning outcomes of students in relation to content knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, we conclude that there is positive correlation between student's learning outcomes and Content Knowledge of social science teachers in elementary schools. The content knowledge effects teaching and the updated version of current development in the field of education enhance achievement of the students.
5. The learning outcomes of students in relation to technological pedagogical knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, we conclude that there is positive correlation between student's learning outcomes and technological pedagogical Knowledge of social science teachers in elementary schools. The various kinds of technology is used by the teacher and that effects and put impression on the mind of learners for the long time.

6. The learning outcomes of students in relation to technological content knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, we conclude that there is positive correlation between students' learning outcomes and technological content Knowledge of social science teachers in elementary schools.
7. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, we conclude that there is positive correlation between students' learning outcomes and technological pedagogical content Knowledge of social science teachers in elementary schools.
8. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools of block Ateli shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, researcher conclude that there is positive correlation between students' learning outcomes and technological content Knowledge of social science teachers in elementary schools of Ateli block.
9. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools of block Narnaul shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, researcher

conclude that there is positive correlation between student's learning outcomes and technological content Knowledge of social science teachers in elementary schools of Narnaul Block

10. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools of block Nangal Chaudhary shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, researcher conclude that There is positive correlation between student's learning outcomes and technological content Knowledge of social science teachers in elementary schools of Nangal Chaudhary block.

11. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools of block Kanina shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, researcher conclude that there is positive correlation between student's learning outcomes and technological content Knowledge of social science teachers in elementary schools of Kanina block.

12. The learning outcomes of students in relation to technological, pedagogical and content knowledge of social science teachers in elementary schools of block Mahendergarh shows the value of $p = 0.000$ is less than ($\alpha = 0.01$), null hypothesis will not be accepted at 99% level of significance. Therefore, researcher conclude that there is positive correlation between student's learning

outcomes and technological content Knowledge of social science teachers in elementary schools of Mahendergarh block.

13. The teaching of Social studies subject is helpful in Developing Values. For developing the values a teacher must keep the Knowledge of content, knows how to develop the competence in Problem Solving. He must keep relevant understanding of the subject and can be capable of developing desirable attitudes in children. Through various teaching methods like organizing events teacher can provides training in Co-Operation and develop Character in children. Teacher needs to develop thinking and reasoning power for global understanding among the children. Teacher of social studies shall develop socio cultural understanding and inculcate habits of adjustability and flexibility. One another component of this value development is development of skill in responsible group participation. Here development of healthy teacher pupil relationship exist. Development of Skill in Enquiry and Decision Making, Development of Skills of Tolerance and Openness, Development of Skills in Studying and Learning and provides basis for specialization certainly helps in the developing the values. All these components are not teaching into the spirit as per the data shows.

14. The knowledge of principles of Curriculum Construction/ Curriculum preparation in social studies at elementary level is very important. These principles are Child centeredness, Community centeredness, Flexibility, Integration, Keeping aims and objectives in view, Utility, Development of democratic values, Principle of creativity, Being tentative rather than final, Conservation of culture, Forward looking, Studying current affairs, Developing

ideals and loyalties, Based on actual experience of the student, Sensitivity to changing needs and values, Achievement of wholesome behavior pattern, and Principle of readiness.

15. There are various types of Self Instructional Material in Social Studies like Individualized Instructional Modules (Programmed Instruction, Computer assisted instruction, Project, Assignment etc.) and Group-Directed Instruction Modules (Discussion, Debate, Symposium, Panel discussion, Brain Storming).

16. The use of Self Instructional Material in Social Studies is essential. It helps in clarity of the subject, it make the subject interesting, it is based on maxim of teaching, it saves time and energy, and it develops the scientific attitude. Self-Instructional Material in Social Studies provide motivation, it is effective for slow learners, and develop friendly relation between pupils and teacher. Self-Instructional Material in Social Studies supply new experiences and new energy which helps in the association of ideas and provision of sensory experience. Self-Instructional Material in Social Studies substitutes for direct experiences, making learning Permanent and meet the requirement of individual differences. It also provide opportunities for activities and help in increasing the vocabulary of the students.

17. There are many method in teaching social studies. These method are used according to the need of the content. Some method are used in every type of content teaching at elementary level. These method are like Lecture method, Project method, Unit method, Problem solving method, and Discussion method, socialized recitation method, and supervised study method, Inductive

and Deductive method, Text book method and many more. There is one Laboratory method which is mostly not required at elementary level. Now a day's laboratory method can be used in the form of fields visit to the historical places.

18. There are many skills in teaching social studies. These skills are used according to the need of the content. Some skills are used in every type of content teaching at elementary level. These skills are like skill of Introduction, skill of Questioning, skill of Explaining, skill of Illustration with examples, skill of Stimulus variation, skill of Map reading, skill of Reinforcement, skill of Class room management, skill of Narration, skill of Presentation, skill of using black board, skill of increasing pupil's participation, skill of Team teaching, skill of role playing, skill of silence and non-verbal clues and many more. The above table shows the number of responses block wise. At many stage the teachers were silent and they do not respond anything.

19. The procedure teachers adopt in planning the lesson is different in different schools. Most of the teachers responded that they frame aims and objectives during the preparation of the curriculum. They also said that the curriculum is designed by experts of different places. Teachers adopt the same aims and objectives. They design general objectives, subject objectives and unit objectives. The table data shows that very few teachers prepare unite wise objectives. The specific objectives of the daily lesson is prepared with selecting and arranging the subject matter. Very few moments are there when teacher


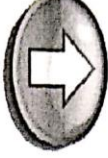

determining the methods of teaching in the class. Teacher just enter into the class and start teaching.




20. The evaluation has its own importance. Evaluation includes measurement. In this questioner there are ten components. The responses for the first component “*Knowledge about the progress of the student*” the block Ateli only 41 teachers had given the positive response and confirm strongly that through evaluation students’ progress can be judged. In Narnaul block thirty teachers responded in the favor, In Nangal Chaudhary block thirty two teachers were responded, In Kanina Block forty one teachers responded and confirm that evaluation is the only method for knowing the knowledge of progress. Sixty Eight teachers of Mahendergarh block had responded in the favour. Rest of the teachers did not reply for this component. They were silent. In the same way Evaluation *helps in clarifying the objectives* of teaching the subject. And for this from Block Ateli Thirty eight, Block Narnaul thirty, Block Nangal Chaudhary forty one, Block Kanina forty eight and Block Mahendergarh fifty five teachers were responded in the favour. Rest of the teachers were silent for this component. The table shows that the responses of the teachers were very particular and some where they were silent. In the same way a group of teachers claims that evaluation helps or the basis of admission, basis of planning of education, basis of guidance, helps in testing the efficiency of the teacher, promotion of better learning, helps in bringing change in curriculum and help in awarding scholarship.

5.2 Result and Discussion

- As per the result the knowledge/cognitive domain of Bloom's taxonomy which is consisted of six hierarchical levels of learning is creating, evaluating, analyzing, applying, understand and remembering. “While we, as researcher/educators, strive for students to reach the highest levels of learning at the top of the pyramid, all levels of learning depend on a solid foundation of those that come below”.

Revised Bloom's Taxonomy Process Verbs, Assessments, and Questioning Strategies

Level of Taxonomy	Definition	Process Verbs	Assessments	Question Stems
 Creating	Generating new ideas, products, or ways of viewing things	Act Arrange Assemble Combine Compose Construct Create Design Develop Devise Formulate	Advertisement Poem Blueprint Cartoon Collage Film Formula Invention New game	Newspaper Painting Plan Play Song Story Video -Can you design a...to...? -Can you see a possible solution to...? -How would you devise your own way to...? -What would happen if...? -How many ways can you...? -Can you create new and unusual uses for...?
 Evaluating	Justifying a decision or course of action	Argue Assess Choose Compare Conclude Criticize Debate Decide Defend	Conclusion Debate Editorial Investigation Judgment Opinion	Recommendation Report Survey Verdict -Is there a better solution to...? -What do you think about...? -Do you think...is a good or bad thing? -How would you feel if...? -How effective are...? -What are the pros and cons of...?
 Analyzing	Breaking information into parts to explore understandings and relationships	Calculate Categorize Classify Compare Contrast Diagram Differentiate Discover Distinguish Examine Experiment	Chart Checklist Database Diagram Graph Illustration Investigation	List Outline Plan Questionnaire Report Spreadsheet Summary -Which events could not have happened? -How is ... similar to ...? -What are some other outcomes? -Why did ...occur? -What was the problem with...?

Level of Taxonomy	Definition	Process Verbs	Assessments	Question Stems
 Applying	Using information in another familiar situation Implementing, carrying out, using, executing	Adapt Apply Calculate Change Compute Demonstrate Dramatize Draw Experiment Illustrate	List Make Manipulate Practice Produce Sequence Show Solve Teach Use Demonstration Diagram Experiment Illustration Journal Lesson Map Model	Performance Poster Prediction Presentation Report Scrapbook Simulation Outline Quiz Revision Reproduction Story Problems Summary Test -Do you know of another instance where...? -Can you group...? -Which factors would you change...? -What questions would you ask of...? -From the information given, can you develop a set of instructions about...?
 Understanding	Explaining ideas or concepts Interpreting, summarizing, paraphrasing, classifying, explaining	Ask Calculate Convert Describe Discuss Explain Give examples Identify Locate	Observe Recognize Report Research Retell Review Summarize Tell Debate Definition Dramatization Example Explanation Label List	Can you write in your own words? -How would you explain...? -What could happen next? -Who do you think...? -What was the main idea...?
 Remembering	Recalling information Recognizing, listing, describing, naming, retrieving, finding	Choose Cite Define Describe Give example Group Know Label List Listen Locate	Match Memorize Name Quote Recall Recipe Record Repeat Select Underline Definition Fact Label List Quiz	-What happened after...? -How many...? -What is...? -Who...? -Can you name...? -Which is true or false?



- The analysis of the data reflects that the teacher must keep the pedagogical content knowledge of the subject which must have finally the learner shall be able to create the new knowledge and correlate the older one. The following is table shows that how learners moves from lowest to highest i.e. remember, understand, apply analyze, evaluate and then create. The ultimate aim of teaching is to educate child, child and earn his livelihood and child can live in society.

LEVEL	DEFINITION	SAMPLE VERBS	SAMPLE OBJECTIVE
Remember (Lowest)	Learner recalls or recognizes information, ideas, and principals	List, label, name, state, define, draw, find, match, record, describe	The learner will be able to list the principal circulating anticoagulants and their target molecules correctly, on a written exam.
Understand	Learner constructs meaning through interpreting, classifying, summarizing, interring, comparing, or explaining	Interpret, illustrate, classify, summarize, extrapolate, compare, contrast, explain	The learner will be able to accurately summarize the major structural components of the underlying dermis in an oral exam.
Apply	Learner selects, transfers, and uses data and principals to complete a problem or task	Execute, implement, use, demonstrate, construct	The learner will be able to locate the radial pulse on a standardized patient and accurately determine the pulse rate.
Analyze	Learner breaks material down into parts to explore understanding and relationships	Differentiate, discriminate, focus, organize, deconstruct, integrate,	The learner will be able to accurately and orally differentiate between antepartum, interpartum, and postpartum stages of obstetrical care.
Evaluate	Learner justifies a decision or course of action.	Check, critique, experiment, judge, justify, test, recommend, defends	Given a patient with diabetes the learner will be able to recommend a treatment plan which includes at least one preventative measure.
Create (Highest)	Learner generates new ideas, products, or ways of thinking	Design, construct, plan, produce, invent, hypothesize,	The learner will be able to create a decision analysis tree from a complex problem that he/she is provided.

Source: <https://ueap.sfsu.edu/content/curriculum/courses/student-learning-outcomes-documents>

- The NCERT Position Paper of teaching of social science also reflects that there is a need to make learning of social science more effective, innovative and enjoyable. Learners may asked to explore the facts from their local surroundings and then give a different outlook. In this way they can create a

new knowledge. Here are various examples given in this picture which are suggestive for the teacher even at elementary level.

Local Crafts and Museums

In order to make the learning of social science more enjoyable and effective, there is a need for innovations in teaching methods. Social science learning should involve visits to museums at local, state, and national levels. Students may be asked to explore the local surroundings and observe the activities of artisan communities engaged in different crafts using local skills and materials. These handicrafts may be displayed in a small corner of the school and developed into a museum.

The schools could have their own social science museums. During the summer break, students may be asked to make models of historical monuments, charts indicating the effects of volcanoes or earthquakes, crossword games or puzzles. The children may paint phenomena related to the natural environment. Newspaper or magazine cuttings related to topics in the syllabus, or related information downloaded from the Internet, can be displayed. This museum could be laid out in different ways from time to time so that it does not become dated. Students may also be involved in other activities

- Social Science week can be celebrated in the school.
- Students may be taken out to visit a nearby museum or centre of arts and crafts.
- Students can be encouraged to watch the night sky, observe the phases of the moon, note the timings of sunrise and sunset, describe the duration of day and night, and record their experiences and observations in a journal.
- Students can be taken to visit historical monuments and sketch these monuments and write about them. The sketches can be displayed in the school.

Scanned with CamScanner

Source: NCERT Position Paper of teaching of social science

5.3 National Importance of the Study

The present research work “study of learning outcome of students in relation to pedagogical content knowledge of elementary” has an importance at national level. The incorporation of technology at every stage is important. Government has taken initiative for digitization. Every school must computer lab and every teacher must acquaint with the digitalization. The impact of technology is seen now a days in teaching learning process. This is the initial stage of use of technology in classroom. The study helps in understanding the concept at national level and academic leaders that pedagogy content knowledge incorporating technology is showing good results. It helps in school practices in assessment for learning. It can be helpful in designing

the education policy at school level. It also help at micro level teaching learning process where lesson planning is an essential component. Government of India has prepared the policy document for digital initiative. At this stage the monitoring of the implementation is required at national level where the area could be pedagogical content knowledge with the incorporation of technology in it.

5.4 Suggestion for the Further Research

Every research has some delimitation and therefore there are always few suggestions for the further research to make at least some of the dimensions complete. These suggestions are based on the views collected during data collection. The competency of a teacher is always on stake. The competency of a teacher is judged by the learning outcomes of the child. But there are various factors which are responsible for the success of the child. Child is not living in school only. Child is not taught by single teacher. Child is not attended by teacher all the time. Therefore learning outcome of a child is not only depends on the classroom teaching but also other external influencing factors. Here the influencing factors could be parents, their socio-economic status, their educational background, living in a joint family or single family, single child or other siblings, teaching by parents or by private coaching and many more. In the same way peer group, society, and individual differences. Role of technology plays a major time in understanding/ capturing the thoughts of a child. These factors can be taken into consideration while conducting the further research. Every teacher is competent; keeping in mind the parents have blind trust on teachers and handover their child's future in their hand. Parents do not even question on the competency level of the teacher in terms of teaching, in terms of handling/ dealing with child, and not even parents think of the partial behavior of the teacher. Parents keep a very high value for teachers. One very important factor can be taken into consideration for further research

that whether teachers ward is studying in the same school where there are teaching. Teacher knows the teaching style of their fellow teachers and then they decide to admit their child in the same school or the other school.